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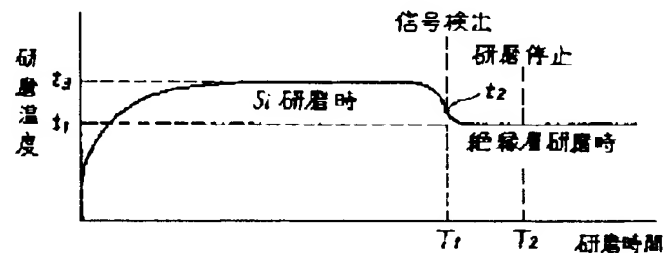
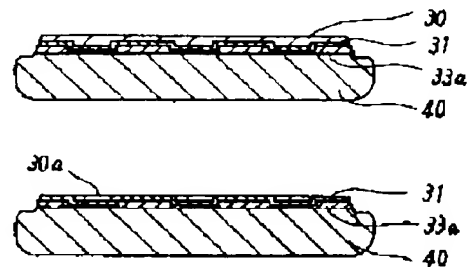
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TITLE : POLISHING END POINT DETECTING METHOD AND ITS POLISHING APPARATUS



ABSTRACT : PURPOSE: To detect the end point of polishing at a high accuracy when a substrate having material layers different in friction coefficient is polished wherein the polishing temp. change is detected to automatically end the polishing at the time when a specified polishing temp. is reached.

CONSTITUTION: A clad SOI wafer is set in a polisher so as to polish its Si substrate face 30. When the polishing of this face begins, the polishing temp. rises to  $t_3$  in the lapse of the polishing time and becomes stable at that temperature. When an  $\text{SiO}_2$  face 31 begins to appear from the face 30 during polishing, the polishing temp. begins going down and becomes stable when the entire face 31 appears. A signal of the polishing time  $T_1$  required for changing to a polishing temp.  $t_2$  from  $t_3$ ;  $t_2$  being set during reducing of  $t_3$  to  $t_1$ . Since this signal of the time  $T_1$  is provided in the midway that the entire wafer changes from the face 30 to the face 31, the polishing automatically ends at a time  $T_2$  taken with an allowance from changing the entire face to the  $\text{SiO}_2$  face 31.

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